Hudson River
PCBs SUPERFUND SITE

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EPA & GE Sign Agreement To Design Hudson River Cleanup

On August 13, 2003 EPA signed an agreement with General Electric Company (GE) to perform the project design work for the cleanup of PCB-contaminated sediment in the Upper Hudson River. Under the agreement, embodied in the *Administrative Order on Consent for Remedial Design and Cost Recovery* (Design AOC), GE is responsible for designing a dredging project that will be conducted over a six-year period, in two phases, consistent with the February 2002 Record of Decision (ROD) for the site and the engineering performance standards developed by EPA to ensure that the dredging is done safely and effectively. The company will also pay up to $28 million in partial reimbursement of EPA's past and future costs associated with the dredging project.

GE will perform key activities needed to complete the design of the Upper Hudson dredging project, including:

- **Evaluating sediment sampling data resulting from the collection and analysis of approximately 30,000 sediment samples from the Upper Hudson. This sampling work, which began in the fall of 2002, is being performed under a separate AOC signed in July 2002.**
- **Developing engineering and design specifications to support EPA's selection of sites for sediment processing/transfer facilities, and designing these facilities.**

- **Determining locations for the disposal of the dredged and dewatered sediments.**
- **Developing engineering and other information needed to select which areas of sediment will be removed during phase 1 and phase 2 of the dredging project.**
- **Developing all remedial design documents.**
- **Designing an effective monitoring program that meets the objectives of the engineering performance standards developed by EPA.**

EPA will retain direct responsibility for three aspects of the design project:

- **Siting of sediment processing/transfer facilities.**
- **Development and peer review of engineering performance standards.**
- **Community outreach and involvement for the project.**

EPA will oversee the specific activities GE undertakes during the design process and will be responsible for reviewing and approving all design work plans and reports.

EPA released the draft Design AOC to the public on May 28. The agreement is available on EPA's project Web site at www.epa.gov/hudson..

Additional negotiations with GE will begin shortly to address the company's performance of the actual dredging work and the reimbursement of the remainder of EPA's past and future costs.

Design Work Plans Released to Public for Review & Input

The Design AOC incorporates design work plans that address the design of the dredging work: habitat delineation and assessment, cultural and archaeological resources, and baseline monitoring for the cleanup project. The agreement and work plans were released on May 28 in draft form to give the public an opportunity to review the detailed work plans and for EPA to consider public input on them. In response to public requests for additional review time, EPA extended the review period from three weeks to five weeks. EPA and GE made certain changes to the work plans in response to public comments. The final versions of the design work plans have been approved by EPA and are appendices to the Design AOC.

EPA released the draft design work plans to the public on May 28 for review and input and presented the work plans at public forums on June 2 (Glens Falls) and June 3 (Albany). The review and input period closed on July 2.

Remedial Design Work Plan

The plan for designing the dredging project is detailed in the *Remedial Design Work Plan*, which describes design support activities, the engineering design process, key design reports and deliverables, and schedule milestones. The *Baseline Monitoring Program Scoping Document* and work plans describing habitat delineation and assessment and cultural and archeological

resources assessment are included as appendices to the *Remedial Design Work Plan*.

Baseline Monitoring Program Scoping Document

The baseline monitoring program is detailed in the *Baseline Monitoring Program Scoping Document*, which addresses pre-dredging or "baseline" monitoring that will be done to evaluate whether the project is meeting the engineering performance standard for the resuspension of dredged sediments.

Habitat Delineation and Assessment Work Plan

The *Habitat Delineation and Assessment Work Plan* addresses the impacts of dredging and other cleanup activities on aquatic and wildlife habitat in the Upper Hudson. The primary goal of this program is to obtain information on the existing physical structure and associated ecological functions of the habitats in the Upper Hudson. This will provide a basis for establishing the criteria for habitat replacement following dredging. The *Habitat Delineation and Assessment Work Plan* specifies the inspections, measurements, sampling and analysis tasks to be performed in order to develop the habitat replacement program.

Cultural and Archaeological Resources Assessment Work Plan

The *Cultural and Archaeological Resources Assessment Work Plan* addresses the need to evaluate, prior to dredging, the potential effects of dredging on cultural and archeological resources in the Upper Hudson River and along shoreline areas so that cultural and archaeological resources of significance are adequately protected. Information about the historic properties in and near areas to be dredged will be identified and potential impacts will be assessed.

The* Remedial Design Work Plan, *the* Baseline Monitoring Program Scoping Document, Habitat Delineation and Assessment Work Plan, *and the* Cultural and Archeological Resources Assessment Work Plan *and fact sheets on the work plans are available on EPA's project Web site at www.epa.gov/hudson.

Project Design Activities Planned for the Remainder of 2003:

- **Identification of Final Candidate Sites**
- **Release of Draft Quality of Life Performance Standards for Public Review and Input**
- **Peer Review of Engineering Performance Standards**
- **Sediment Characterization Work in Upper Hudson River**

More information on site activities can be found at www.epa.gov/hudson.

2003 Season of the Sediment Sampling Program Underway

GE field crews began the second year of comprehensive sediment sampling in the Upper Hudson River on May 19. The river sediment sampling program was initiated last year and should be

near completion this fall, with a possibility of limited sampling occurring next spring to fill in data gaps. The program will provide the data necessary to delineate specific areas of the river to be dredged. Specifically, the program will help determine the distribution of PCBs in sediment, refine estimates for the quantity of PCBs in sediment and establish the chemical and physical properties of the sediment to evaluate engineering options for sediment removal and processing.

During the 2002 field season 5,546 samples were collected from cores at approximately 1,000 locations between Fort Edward and Gansevoort and in three distinct areas in the five miles between Gansevoort and Schuylerville. Sediment samples were sent to independent laboratories for PCB analysis. Some of the samples also were analyzed for additional chemicals and physical properties such as grain size and bulk density.

This year's sampling program will involve collection of approximately 5,000 cores from additional areas between Rogers Island and Schuylerville and the 29 miles between Schuylerville and Troy. After processing, these cores should generate approximately 25,000 sediment samples.
In addition to the sediment sampling program, GE will conduct side-scan sonar surveys to map sediment type and evaluate the presence, if any, of submerged archaeological artifacts.

Sediment sampling and characterization work in 2003 is being performed by GE under the July 2002 Sampling AOC and in accordance with the *Revised Community Health & Safety Plan* (Revised CHASP), which is available at www.epa.gov/hudson . The Revised CHASP, which replaces an earlier CHASP approved by EPA in September 2002, presents the health and safety plan for the local community for sediment sampling and characterization activities plus field activities specified in the design work plans incorporated under the Design AOC.

Facility Siting Update: Preliminary Candidate Sites Identified

In order to implement the cleanup of PCB-contaminated sediment in the Upper Hudson, EPA must locate and construct temporary facilities that will be used to transfer and remove the water from (dewater) the dredged sediment.

Three main operations will occur at these facilities:

- **transferring of dredged sediment from barges or pipelines to the facility;**
- **processing and dewatering of the sediment; and**
- **transferring the processed sediment to barge or rail for off-site disposal.**

Twenty four preliminary candidate sites are currently being assessed against criteria described in the *Hudson River PCBs Superfund Site Facility Siting Concept Document, December 2002* (Concept Document). Preliminary candidate sites are those sites that are being recommended for further consideration in the facility siting process.

The *Technical Memorandum: Identification of Preliminary Candidate Sites Facility Siting Update Report 1, June 2003* (Tech Memo) provides the results of detailed evaluation and screening used to identify the preliminary candidate sites. The Concept Document and Tech

Memo are both available at www.epa.gov/hudson or by calling the Hudson River Field Office. The identification of preliminary candidate sites represents the second milestone in EPA's facility siting process. EPA will continue to involve the public at each phase of the facility siting process.

On June 4 EPA released a list of 24 preliminary candidate sites and held public forums on June 10 (Glens Falls) and on June 11 (Albany) to present the sites and answer questions about the site identification process.

Later this summer, following assessment and evaluation work on the preliminary candidate sites, a list of final candidate sites will be released to the public for review. Field investigations of each of the final candidate sites will then be performed this fall and winter and evaluations performed to develop a list of recommended site(s). The recommended site(s) list will be provided in the *Draft Facility Siting Report* and released to the public for review and comment. Upon finalizing the *Facility Siting Report*, a site, or sites, will be selected for the Phase 1 dredging activities. At some later date, a site, or sites, may be selected for Phase 2 dredging if additional sites are determined to be necessary. Site(s) selected for Phase 1 and Phase 2 dredging will be selected from the list of the recommended site(s).

PCSs River Sections	Location	Approx. River Mile
River Section 1		
Energy Park (Champlain Canal)	Fort Edward, Washington County	195.1
Longe (Champlain Canal)	Fort Edward, Washington County	195.0
Old Moreau Dredge Spoils Area	Moreau, Saratoga County	193.8
State of New York (A)	Moreau, Saratoga County	193.2
River Section 2		
Georgia Pacific	Greenwich, Washington County	183.2
River Section 3		
Bruno	Schaghticoke, Rensselaer County	166.5
Brickyard Associates	Schaghticoke, Rensselaer County	166.0
Edison Paving	Schaghticoke, Rensselaer County	164.0
NIMO – Mechanicville	Halfmoon, Saratoga County	164.0
NYS Canal Corporation	Halfmoon, Saratoga County	162.4
General Electric (C)	Waterford, Saratoga County	159.0
Green Island IDA	Green Island, Albany County	154.4
Below River Section 3		
Troy Slag/Rensselaer IDA	Troy, Rensselaer County	151.4
Callanan/Rensselaer IDA/City of Troy/King Services	Troy, Rensselaer County	150.8
Town of North Greenbush	N. Greenbush, Rensselaer County	148.7
Rensselaer Tech Park (A)	Rensselaer, Rensselaer County	147.7
Rensselaer Tech Park (B)	Rensselaer, Rensselaer County	147.3
State of New York/First Rens-selaer Marine Management	Rensselaer, Rensselaer County	146.7
Albany Rensselaer Port District/BASF	Rensselaer, Rensselaer County	144.3
Bray Energy	Rensselaer, Rensselaer County	144.0
Bray Energy/Petrol/ Gorman/Transmontaigne	Rensselaer and E. Greenbush, Rensselaer County	144.0
Norwest	E. Greenbush, Rensselaer County	143.5
OG Real Estate	Bethlehem, Albany County	142.8
P&M Brickyard	Coeymans, Albany County	134.1

Draft Engineering Performance Standards Released to Public

Engineering performance standards are technical requirements to help ensure that the cleanup meets the objectives for protecting people's health and the environment set forth in the ROD and does not cause adverse health or environmental impacts. They will be developed to make sure the dredging is done safely and stays on schedule.

The ROD requires the development of the following engineering performance standards:

- **Dredging-related resuspension**
- **Dredging residuals**

- **Dredging productivity**

A detailed description of the draft standards and supporting technical information can be found in the *Draft Engineering Performance Standards - Public Review Copy*. A series of four fact sheets were developed to assist the public in the review of the draft engineering performance standards – a general overview fact sheet, and one fact sheet for each of the three engineering performance standards. The performance standards document and fact sheets are available on the EPA project Web site at www.epa.gov/hudson.

Draft engineering performance standards were released on May 14 for a 60-day public comment period, which closed on July 14. EPA hosted public forums on the draft engineering performance standards on May 21 (Ft. Edward), May 22 (Poughkeepsie), June 2 (Glens Falls) and on June 3 (Albany).

Dredging-Related Resuspension

The resuspension standard is designed to protect water intakes down river of the dredging operations and to limit the down river transport of PCB-contaminated dredged material. This will promote the recovery of the river ecosystem after dredging. A water quality-monitoring program will be carried out to show that the objectives of the resuspension standard have been met during dredging. Sampling results will be used to determine whether additional measures are needed to ensure protection of public health and the environment. If necessary, these measures could include expanding the monitoring program, implementing operational or engineering improvements to reduce resuspension levels or temporarily halting the dredging.

The resuspension standard and action levels will be used to control PCB concentrations in the river downstream of the dredging to protect public water intakes and to minimize the impact of dredging-related releases on the recovery of the Hudson River ecosystem.

Dredging Residuals

The residuals standard is designed to detect and manage small amounts of contaminated sediments that may remain on the river bottom after dredging in the Upper Hudson River. These residuals may consist of contaminated sediments that were disturbed but escaped capture by the dredge, resuspended sediments that were redeposited or that settled, and/or contaminated sediments remaining below the dredging cut lines because they were not detected by the sediment sampling program.

Dredging Productivity

The productivity standard is designed to keep the dredging work on track to meet the goal of completing the project within a six-year period. The productivity standard defines the total project sediment volumes to be dredged by the end of each project phase and dredging season, based on the current estimate of 2.65 million cubic yards of sediment to be removed. Maintaining an appropriate dredging production rate will help to clean up the river within a reasonable time frame and simultaneously limit the duration of construction-related impacts.

Peer Review
The draft engineering performance standards were developed using objective environmental, scientific, and technical criteria. They will be independently peer reviewed to ensure that they are technically adequate, properly documented, and satisfy quality requirements.

EPA is currently evaluating public comments on the performance standards. The performance standards documents will be revised as appropriate and presented for peer review. Eastern Research Group, Inc. (ERG), an EPA contractor who has not been involved in the development of the engineering performance standards, will select the peer reviewers and will convene the panel, facilitate its work, and compile the panel's findings into a Peer Review Report.

EPA invited the public to nominate candidates for the peer review panel during a two-week period from July 11 through July 25. EPA performed an initial screening of all nominees received from the public for technical expertise and conflicts-of-interest, and compiled an alphabetical list of the screened nominees that was provided to ERG for its consideration in selecting the independent peer reviewers. In order to preserve the independence of the process for selecting the panel members, the list did not identify who recommended any of the candidates, and EPA did not recommend that ERG select any specific candidates on the list.

The formal peer review meeting is expected to take place in the fall of 2003. The conclusions of the peer review panel will be presented in the Final Peer Summary Report, which the Agency anticipates will be released to the public in late 2003. EPA expects to finalize the engineering performance standards in early 2004.

A second peer review will be held between Phase 1 and Phase 2 of the dredging.

Quality of Life Performance Standards Under Development
Quality of Life performance standards are intended to minimize the adverse impacts of the dredging, dewatering, and support operations on people, businesses, recreation, agriculture, and community activities in the Upper Hudson River project area. Potential impacts include noise, air quality exceedances, light, river traffic, and odor. The ROD includes performance standards for air emissions and preliminary performance standards for noise emissions. The ROD further requires the development of additional quality of life standards by EPA during design, with input from the public and in consultation with the state and the federal Natural Resource Trustees.

Draft quality of life performance standards are currently being developed by EPA and will be released to the public for input this Fall.

EPA Proposes Plan for Continued Community Involvement

During project design, EPA will focus efforts on getting public input and providing information on those decisions and activities that have the greatest potential impact on the community and on the big-picture issues that are most important to the public. On April 24, EPA released for public review and comment a proposed Community Involvement Plan (CIP) for the Hudson River PCBs Superfund Site.

The public comment period on the proposed CIP began April 28 and closed May 28. EPA hosted public forums on the proposed CIP on May 7 (Ft. Edward) and on May 8 (Poughkeepsie). The proposed CIP is available at www.epa.gov/hudson.

In developing the plan, EPA made an extensive effort to gather public input and drew upon many information sources, including public comments received in the past and numerous and detailed community interviews, meetings, and site files. The proposed CIP identifies 35 tools and activities that will be used to address community concerns and provides the public with myriad opportunities for involvement in the project.

The proposed CIP is designed to meet the following goals:

- **Provide the public with accurate, timely, and understandable information and access to the information needed to understand the project as it moves forward;**
- **Provide the public with the opportunity to give informed and meaningful input;**
- **Ensure adequate time and opportunity for the public to provide input and for that input to be considered;**
- **Respect and give full consideration to community input; and**
- **Assist the public in understanding the project decision making process during project design and cleanup and the community's role in that process.**

EPA is currently revising the proposed CIP in response to public comments and preparing individual responses to comments. EPA anticipates finalization of the CIP and release to the public in early September.

Interim Community Advisory Group Convenes

Among the most notable community involvement tools in the proposed CIP is the formation of a Community Advisory Group (CAG) designed to provide a forum through which members of communities and stakeholder groups along the entire Hudson River PCBs site can present and discuss their needs and concerns about the design of the cleanup plan and its implementation. The proposed CAG offers EPA an enhanced opportunity to hear and consider community input.

The CIP identifies key interest groups along the Hudson River and the elected officials, agencies and community organizations representing those interests that would nominate members of the CAG. To facilitate community input in the near-term, the Agency asked individuals and organizations identified in the proposed CIP to nominate members to serve on an interim community advisory group (IAG). To date, the IAG held meetings on May 21 (initial meeting), June 25, and July 31. The next meeting of the IAG is scheduled for September 11. EPA expects to have a formal CAG in place within a couple of months after finalization of the CIP.

Contacts & Feedback:

If you have comments on this progress report, or have suggestions for future progress reports, please contact David Kluesner, Community Involvement Coordinator, U.S. EPA, Region 2, at (212) 637-3653 or e-mail at kluesner.dave@epa.gov.

Hudson River Field Office Toll-Free Number: 1-866-615-6490
EPA has established toll-free service at the Hudson River Field Office to improve access to project information. Providing toll-free access to community members along the entire site is intended to improve the flow of information between EPA and the community.

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